



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

30449

7590

06/09/2009

SCHMEISER, OLSEN & WATTS
22 CENTURY HILL DRIVE
SUITE 302
LATHAM, NY 12110

EXAMINER

DANNEMAN, PAUL

ART UNIT

PAPER NUMBER

3627

DATE MAILED: 06/09/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,119	02/10/2004	Robert A. Orzell	BUR20030192US1	2118

TITLE OF INVENTION: METHOD FOR IDENTIFYING PRODUCT ASSETS IN A SUPPLY CHAIN USED TO SATISFY MULTIPLE CUSTOMER DEMANDS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/09/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issued on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

**Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

30449 7590 06/09/2009

**SCHMEISER, OLSEN & WATTS
22 CENTURY HILL DRIVE
SUITE 302
LATHAM, NY 12110**

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAME INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	---------------------	---------------------	------------------

10708,119 02/10/2004 Robert A. Orzell BUR920030192US1 2118

TITLE OF INVENTION: METHOD FOR IDENTIFYING PRODUCT ASSETS IN A SUPPLY CHAIN USED TO SATISFY MULTIPLE CUSTOMER DEMANDS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/09/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
DANNEMAN, PAUL	3627	705-028000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

1

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

2

3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,119	02/10/2004	Robert A. Orzell	BUR920030192US1	2118
30449	7590	06/09/2009	EXAMINER	
SCHMEISER, OLSEN & WATTS 22 CENTURY HILL DRIVE SUITE 302 LATHAM, NY 12110			DANNEMAN, PAUL	
			ART UNIT	PAPER NUMBER
			3627	
DATE MAILED: 06/09/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1135 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1135 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/708,119

Applicant(s)

ORZELL ET AL.

Examiner

PAUL DANNEMAN

Art Unit

3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 16 March 2009.
2. ☒ The allowed claim(s) is/are 1-30 and 34-43.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Paul Danneman/
Examiner, Art Unit 3627
2 Jun 2009

/F. Ryan Zeender/
Supervisory Patent Examiner, Art Unit 3627

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this Examiner's Amendment was given in a telephone interview with Anthony M. Palagonia, Reg. No. 41,237 on 30 April 2009 to amend Claim 29 and on 2 June 2009 to amend Claim 1 and 15.

The Application has been amended as follows:

3. **In the Claims:**

1. (Currently Amended) A method for identifying product assets in a supply chain used to satisfy customer demands, comprising:

- (a) receiving a customer demand schedule for delivery of products;
- (b) receiving a planned inventory requisition schedule of all components to be assembled into said products, said planned inventory requisition schedule generated from said customer demand schedule by a production scheduling run;
- (c) receiving bills of materials listing all components required for each of said products;

after (a), (b) and (c), (d) generating, by a processor of a computer system, first and second coverage files from said planned inventory schedule, from said customer demand schedule and from said bills of materials, said first coverage file containing a list of assets including products to be used for product shipments and components to be assembled into products to meet product shipment demands, said second coverage file containing a list of all other assets;
and

after (d), (e) generating, by said processor of said computer system, ~~from—said~~ from said first and second coverage files, a set of demand pegging records, said demand pegging records associating a quantity and an availability date of each component of each product with a required quantity of each of said products, each demand pegging record consistent with said planned inventory requisition schedule.

15. (Currently Amended) A computer system comprising a processor, an address/data bus coupled to said processor, and a computer-readable memory unit adapted to be coupled to said processor, said memory unit containing instructions that when executed by said processor implement a method for identifying product assets in a supply chain used to satisfy customer demands, said method comprising the computer implemented steps of:

(a) receiving a customer demand schedule for delivery of products;

(b) receiving a planned inventory requisition schedule of all components to be assembled into said products, said planned inventory requisition schedule generated from said customer demand schedule by a production scheduling run;

(c) receiving customer bills of materials listing all components required for each of said products;

after (a), (b) and (c), (d) generating first and second coverage files from said planned inventory schedule, from said customer demand schedule and from said bills of materials, said first coverage file containing a list of assets including products to be used for product shipments and components to assembled into products to meet product shipment demands, said second coverage file containing a list of all other assets; and

after (d), (e) generating ~~from—said~~ from said first and second coverage files, a set of demand pegging records, said demand pegging records associating a quantity and an availability date of each component of each product with a required quantity of each of said products, each demand pegging record consistent with said planned inventory requisition schedule.

29. (Currently Amended) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for identifying product assets in a supply chain used to satisfy customer demands said method steps comprising:

(a) receiving a customer demand schedule for delivery of products;

(b) receiving a planned inventory requisition schedule of all components to be assembled into said products, said planned inventory requisition schedule generated from said customer demand schedule by a production scheduling run;

(c) receiving bills of materials listing all components required for each of said products; each component and product having a low-level-code indicating a sequence in which said components are assembled into said products and each product and component having a unique part-number;

after (a), (b) and (c), (d) generating first and second coverage files from said planned inventory schedule, from said customer demand schedule and from said bills of materials, said first coverage file containing a list of assets including products to be used for product shipments and components to be assembled into products to meet product shipment demands, said second coverage file containing a list of all other assets; and

after (d), (e) generating ~~from said~~ from said first and second coverage files, a set of demand pegging records, said demand pegging records associating a quantity and an availability date of each component of each product with a required quantity of each of said products, each demand pegging record consistent with said planned inventory requisition schedule.

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

4. **Best U.S. reference:** Dietrich et al., US 5,548,518, teaches a novel allocation method for generating a feasible production schedule. The method, in response to a specified requirement (q),

comprises the steps of determining what quantity (r) of a product can be produced with a specified quantity of supply components; allocating a required quantity of supply components for filling a thus defined partial order; and filling a remainder of the requirement (q-r) at some later time.

5. **Best NPL reference: Lyon, Peter, Matching Assets with Demand in Supply-Chain Management at IBM Microelectronics, published in INFORMS, Journal ISSN:0092-2102, V31, n1, p.108-124,** teaches a supply-chain-management (SCM) process with the best-can-do (BCD) activity to determine how to best meet prioritized demand without violating temporal, asset, or capacity constraints. It creates a projection of what can be produced to meet demand, a key element of the available-to-promise (ATP) type of matching. The optimal-manufacturing-resource-planning (OMRP) and BCD application move work units (WIP or starts) either forward to project completed parts or backwards to determine starts required across the bill-of-material (BOM) chain using cycle time, yield, capacity, and product structure. Implosion is typically used to estimate what finished goods will be available to meet demand and explosion to estimate what starts are needed at what due dates to insure meeting existing demand on time.

6. No prior art cited here or in any previous Office action fully anticipates nor renders the claims obvious either alone or in combination. Independent Claim 1 and its dependent Claims 2-7 satisfy customer demands by receiving a customer demand schedule for delivery of products, receiving a planned inventory requisition schedule for all components of the products, bills of material of all components where each component and product listed in the bills of material have a low-level-code indicating a sequence in which said components are assembled into said products (as recited in Claims 1, 6 and 29), to generate a set of demand pegging records associating a quantity and an availability date for each component of each product with a required quantity of each said products where each demand pegging record is consistent with a planned inventory requisition schedule. Independent Claims 8, 15, 20, 22, 29 and 30 and their dependent claims recite similar limitations.

Conclusion

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled **"Comments on Statement of Reasons for Allowance."**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/
Examiner, Art Unit 3627
18 May 2009

/F. Ryan Zeender/
Supervisory Patent Examiner, Art Unit 3627